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*Director*



July 26, 2021

Mr. Theodore Bratton  
Chief Executive Officer  
Wake Stone Corporation - Triangle Quarry  
P.O. Box 190  
Knightsdale, NC 27545

Subject: Air Permit No. 04386R16  
Wake Stone Corporation - Triangle Quarry  
Cary, Wake County, North Carolina  
Permit Class: Small  
Facility ID# 9200409

Dear Mr. Bratton:

In accordance with your completed application received April 30, 2021, we are forwarding herewith Permit No. 04386R16 to Wake Stone Corporation - Triangle Quarry, Cary, Wake County, North Carolina for the construction and operation of air emissions sources or air cleaning devices and appurtenances. Please note the records retention requirements are contained in General Condition 2 of the General Conditions and Limitations.

If any parts, requirements, or limitations contained in this permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. Such a request will stay the effectiveness of the entire permit. This hearing request must be in the form of a written petition, conforming to G.S. 150B-23 of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Unless a request for a hearing is made pursuant to G.S. 150B-23, this air permit shall be final and binding.

You may request modification of your air permit through informal means pursuant to G.S. 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that the permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under G.S. 150B-23.



North Carolina Department of Environmental Quality | Division of Air Quality

Raleigh Regional Office | 3800 Barrett Drive | Raleigh, NC 27609

919.791.4200 T | 919.881.2261 F

**Unless exempted by a condition of this permit or the regulations, construction of new air pollution sources or air cleaning devices, or modifications to the sources or air cleaning devices described in this permit must be covered under a permit issued by the Division of Air Quality prior to construction. Failure to do so is a violation of G.S. 143-215.108 and may subject the Permittee to civil or criminal penalties as described in G.S. 143-215.114A and 143-215.114B.**

This permit shall be effective from July 26, 2021 until June 30, 2029, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

**Changes have been made to the permit stipulations. The Permittee is responsible for carefully reading the entire permit and evaluating the requirements of each permit stipulation. The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. Specific changes and additions are summarized below (note: this list may not include all changes and additions):**

- Permit renewed with new expiration date and CY2028 Emissions Inventory criteria in the updated condition 2D .0202.
- Permit condition previously listed under Rule 2D .0501 was updated and is now listed under Rule 2D .0605.
- Permit condition previously listed under Rule 2D .0510 describing the existing primary crusher as a "jaw crusher rated at 1620 tons per hour at a 16-inch crusher setting" was removed.
- Permit condition for Rule 2D .0521 was updated to better reflect the rule language.

Should you have any questions concerning this matter, please contact Dena Pittman at 919-791-4200.

Sincerely,



Taylor Hartsfield, EIT, CPM, Regional Supervisor  
Division of Air Quality, NC DEQ

DLP  
Enclosures

c: Raleigh Regional Office

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF AIR QUALITY

**AIR PERMIT NO. 04386R16**

Issue Date: July 26, 2021

Effective Date: July 26, 2021

Expiration Date: June 30, 2029

Replaces Permit: 04386R15

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To construct and operate air emission source(s) and/or air cleaning device(s), and for the discharge of the associated air contaminants into the atmosphere in accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina (NCGS) as amended, and other applicable Laws, Rules and Regulations,

Wake Stone Corporation - Triangle Quarry  
222 Star Lane  
Cary, Wake County, North Carolina  
Permit Class: Small  
Facility ID# 9200409

(the Permittee) is hereby authorized to construct and operate the air emissions sources and/or air cleaning devices and appurtenances described below:

Emission Source ID	Emission Source Description	Control System ID	Control System Description
<b>Non-Metallic Mineral Processing Plant, utilizing water suppression with no other control device, including:</b>			
ES-Crushers (NSPS)	crushing operations	N/A	N/A
ES-Conveyors (NSPS)	conveyor operations	N/A	N/A
ES-Screens (NSPS)	screening operations	N/A	N/A

in accordance with the completed application 9200409.21A received April 30, 2021 including any plans, specifications, previous applications, and other supporting data, all of which are filed with the Department of Environmental Quality, Division of Air Quality (DAQ) and are incorporated as part of this permit.

This permit is subject to the following specified conditions and limitations including any **TESTING, REPORTING, OR MONITORING REQUIREMENTS:**

### **A. SPECIFIC CONDITIONS AND LIMITATIONS**

1. Any air emission sources or control devices authorized to construct and operate above must be operated and maintained in accordance with the provisions contained herein. The Permittee shall comply with applicable Environmental Management Commission Regulations, including Title 15A North Carolina Administrative Code (NCAC), Subchapter 2D .0202, 2D .0510, 2D .0521, 2D .0524 (40 CFR 60, Subpart OOO), 2D .0535, 2D .0540, 2D .0605 and 2D .1806.
2. PERMIT RENEWAL AND EMISSION INVENTORY REQUIREMENT - The Permittee, at least 90 days prior to the expiration date of this permit, shall request permit renewal by letter in accordance with 15A NCAC 2Q .0304(d) and (f). Pursuant to 15A NCAC 2Q .0203(i), no permit application fee is required for renewal of an existing air permit (without a modification request). The renewal request (with application Form A) should be submitted to the Regional Supervisor, DAQ. Also, at least 90 days prior to the expiration date of this permit, the Permittee shall submit the air pollution emission inventory report (with Certification Sheet) in accordance with 15A NCAC 2D .0202, pursuant to N.C. General Statute 143 215.65. The report shall be submitted to the Regional Supervisor, DAQ and shall document air pollutants emitted for the 2028 calendar year.
3. PARTICULATE CONTROL REQUIREMENT - As required by 15A NCAC 2D .0510 "Particulates from Sand, Gravel, or Crushed Stone Operations," the following requirements apply:
  - a. The Permittee of a sand, gravel, recycled asphalt pavement (RAP), or crushed stone operation shall not cause, allow, or permit any material to be produced, handled, transported, or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne to prevent exceeding the ambient air quality standards beyond the property line for particulate matter, both PM<sub>10</sub> and total suspended particulates.
  - b. Fugitive dust emissions from sand, gravel, RAP, or crushed stone operations shall be controlled by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources."
  - c. The Permittee of any sand, gravel, RAP, or crushed stone operation shall control process-generated emissions:
    - i. From crushers with wet suppression (excluding RAP crushers); and
    - ii. From conveyors, screens, and transfer pointssuch that the applicable opacity standards in 15A NCAC 2D .0521 Control of Visible Emissions," or 15A NCAC 2D .0524 "New Source Performance standards" are not exceeded.

4. VISIBLE EMISSIONS CONTROL REQUIREMENT - As required by 15A NCAC 2D .0521 "Control of Visible Emissions," visible emissions from the emission sources, manufactured after July 1, 1971, shall not be more than 20 percent opacity when averaged over a six-minute period, except that six-minute periods averaging not more than 87 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. However, sources which must comply with a visible emissions standard in 15A NCAC 2D .0524 "New Source Performance Standards" or .1110 "National Emission Standards for Hazardous Air Pollutants" shall meet that standard instead of the 2D .0521 visible emissions standard.
  
5. VISIBLE EMISSIONS CONTROL REQUIREMENT - As required by 15A NCAC 2D .0521 "Control of Visible Emissions," visible emissions from the emission sources, manufactured as of July 1, 1971, shall not be more than 40 percent opacity when averaged over a six-minute period, except that six-minute periods averaging not more than 90 percent opacity may occur not more than once in any hour nor more than four times in any 24-hour period. However, sources which must comply with a visible emissions standard in 15A NCAC 2D .0524 "New Source Performance Standards" or .1110 "National Emission Standards for Hazardous Air Pollutants" shall meet that standard instead of the 2D .0521 visible emissions standard.
  
6. 15A NCAC 2D .0524 "NEW SOURCE PERFORMANCE STANDARDS" - For the nonmetallic mineral processing equipment (wet material processing operations, as defined in 60.671, are not subject to this Subpart) including conveyor operations (ID No. ES-Conveyors), crushing operations (ID No. ES-Crushers) and screening operations (ID No. ES-Screens), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards" (NSPS) as promulgated in 40 CFR 60, Subpart OOO, including Subpart A "General Provisions."
  - a. NSPS Reporting Requirements - In addition to any other notification requirements to the Environmental Protection Agency (EPA), the Permittee is required to NOTIFY the Regional Supervisor, DAQ, in WRITING, of the following:
    - i. The actual date of initial start-up of an affected facility, postmarked within 15 days after such date;
  
  - b. NSPS Emissions Limitations - As required by 15A NCAC 2D .0524 [40 CFR 60.672], the following permit limits shall not be exceeded:
    - i. For affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008 (wet material processing operations, as defined in 60.671, and Like-For-Like-Replacement, as allowed in 60.670(d), are not subject to this Subpart):

Affected Facility	Pollutant	Emission Limit
Crushers	Visible Emissions	15% opacity
Fugitive emissions from conveyor belts, screening operations, and other affected facilities	Visible Emissions	10% opacity

- ii. For affected facilities that commenced construction, modification, or reconstruction on or after April 22, 2008 (wet material processing operations, as defined in 60.671, and Like-For-Like-Replacement, as allowed in 60.670(d), are not subject to this Subpart):

Affected Facility	Pollutant	Emission Limit
Crushers	Visible Emissions	12% opacity
Fugitive emissions from conveyor belts, screening operations, and other affected facilities	Visible Emissions	7% opacity

- c. NSPS Monitoring Requirements - As required by 15A NCAC 2D .0524 [40 CFR 60.674], the following monitoring shall be conducted:

- i. For any affected facility that commenced construction, modification, or reconstruction on or after April 22, 2008 that uses wet suppression to control emissions (Like-For-Like-Replacement, as allowed in 60.670(d), is not subject to this Subpart), the Permittee shall:
- A. Perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression systems.
  - B. Initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles.

- d. NSPS Recordkeeping Requirements - As required by 15A NCAC 2D .0524 [40 CFR 60.676], the following recordkeeping requirements shall be conducted:

- i. Each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, shall be recorded in a logbook (in written or electronic form).
- ii. The logbooks (in written or electronic form) shall be maintained on-site and made available to DAQ personnel upon request.

- e. NSPS Performance Testing - As required by 15A NCAC 2D .0524, the following performance tests shall be conducted:

Affected Facility	Pollutant	Test Method
Crushers	Visible Emissions	Method 9
Fugitive emissions from conveyor belts, screening operations, and other affected facilities	Visible Emissions	Method 9

- i. All performance tests shall be conducted in accordance with EPA Reference Methods, contained in 40 CFR 60, Appendix A;
- ii. The EPA Administrator retains the exclusive right to approve equivalent and alternative test methods, continuous monitoring procedures, and reporting requirements;
- iii. Within 60 days after achieving the maximum production rate at which the affected facility(s) will be operated, but not later than 180 days after the initial start-up of the affected facility(s), the Permittee shall conduct the required performance test(s) and submit two copies of a written report of the test(s) to the Regional Supervisor, DAQ;
- iv. The Permittee shall be responsible for ensuring, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate or at a lesser rate if specified by the Director or his delegate;
- v. All associated testing costs are the responsibility of the Permittee;
- vi. The Permittee shall arrange for air emission testing protocols to be provided to the DAQ prior to testing. Testing protocols are not required to be pre-approved by the DAQ prior to testing. The DAQ shall review testing protocols for pre-approval prior to testing if requested by the Permittee at least 45 days before conducting the test; and
- vii. To afford the Regional Supervisor, DAQ, the opportunity to have an observer present, the Permittee shall PROVIDE the Regional Office, in WRITING, at least 7 days notice of any required performance test(s) that involve only Method 9. All other tests require a 30 day notice.
- viii. When determining compliance with the visible emissions limit from fugitive emissions from crushers, conveyor belts, screening operations, and other affected facilities (as described in 60.672(b) or 60.672(e)(1)), the duration of the Method 9 test must be 30 minutes (five 6-minute averages). Compliance with the fugitive visible emissions limits must be based on the average of the five 6-minute averages.

- ix. For any affected facility that commenced construction, modification, or reconstruction on or after April 22, 2008 that does not use wet suppression to control emissions, the Permittee shall repeat the performance tests within five (5) years of the previous test.
    - A. If an affected facility relies on water carryover from upstream wet suppression to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement provided that the Permittee conducts periodic inspections of the upstream wet suppression that is responsible for controlling fugitive emissions from the affected facility and designates which upstream wet suppression systems will be periodically inspected at the time of the initial performance test.
  - f. Like-For-Like-Replacement - As provided in 40 CFR 60.670(d), when an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR 60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of 40 CFR 60.672, 60.674, and 60.675 except as provided for in 60.670(d)(3). The Permittee shall comply with the reporting requirements of 40 CFR 60.676(a). Equipment covered under 40 CFR 60.670 shall comply the requirements of 15A NCAC 2D .0521.
7. NOTIFICATION REQUIREMENT - As required by 15A NCAC 2D .0535, the Permittee of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:
- a. Notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Division's next business day of becoming aware of the occurrence and describe:
    - i. the name and location of the facility,
    - ii. the nature and cause of the malfunction or breakdown,
    - iii. the time when the malfunction or breakdown is first observed,
    - iv. the expected duration, and
    - v. an estimated rate of emissions.
  - b. Notify the Director or his designee immediately when the corrective measures have been accomplished.

This reporting requirement does not allow the operation of the facility in excess of Environmental Management Commission Regulations.



8. FUGITIVE DUST CONTROL REQUIREMENT - As required by 15A NCAC 2D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints are received or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 2D .0540(f).

"Fugitive dust emissions" means particulate matter that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

9. QUARRY EQUIPMENT REPORTING - As required by 15A NCAC 2D .0605, the Permittee shall maintain on-site an equipment list and a plant (or flow) diagram of all equipment covered under this permit.
- a. The equipment list shall include the following information for each piece of equipment:
    - i. A description of equipment including applicability of New Source Performance Standards, and:
      - A. Width of belt conveyors,
      - B. Dimensions and configuration (e.g., triple deck) of screens, and
      - C. Rated capacity (tons or tons/hr) of all nonmetallic mineral processing equipment.
    - ii. A unique ID number.
    - iii. The date the equipment was manufactured.
    - iv. The dates any required performance testing was conducted and submitted to the Regional Supervisor, DAQ.
  - b. The equipment list and plant (or flow) diagram shall bear the date when the current list and diagrams were revised.
  - c. The Permittee shall provide documentation to the Regional Supervisor, DAQ, for any required performance testing within seven days of a written request.
  - d. Notwithstanding General Conditions and Limitations titled "Equipment Relocation" and "Reporting Requirement," the Permittee may install new and relocate existing nonmetallic mineral processing equipment. The Permittee shall provide written notification to the Regional Supervisor, DAQ, including a revised equipment list and plant (or flow) diagram, each time nonmetallic mineral processing equipment is installed or relocated at a facility. This notification shall be submitted at least 15 days before the equipment is installed or relocated at the facility unless otherwise

approved by the Director. Nonmetallic mineral processing equipment includes all crushers, screens, conveyors and loadout bins.

10. CONTROL AND PROHIBITION OF ODOROUS EMISSIONS - As required by 15A NCAC 2D .1806 "Control and Prohibition of Odorous Emissions" the Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

## **B. GENERAL CONDITIONS AND LIMITATIONS**

1. In accordance with G.S. 143-215.108(c)(1), TWO COPIES OF ALL DOCUMENTS, REPORTS, TEST DATA, MONITORING DATA, NOTIFICATIONS, REQUESTS FOR RENEWAL, AND ANY OTHER INFORMATION REQUIRED BY THIS PERMIT shall be submitted to the:

Regional Supervisor  
North Carolina Division of Air Quality  
Raleigh Regional Office  
3800 Barrett Drive  
Raleigh, NC 27609  
919-791-4200

For identification purposes, each submittal should include the facility name as listed on the permit, the facility identification number, and the permit number.

2. RECORDS RETENTION REQUIREMENT - In accordance with 15A NCAC 2D .0605, any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. These records must be kept on site for a minimum of 2 years, unless another time period is otherwise specified.
3. ANNUAL FEE PAYMENT - Pursuant to 15A NCAC 2Q .0203(a), the Permittee shall pay the annual permit fee within 30 days of being billed by the DAQ. Failure to pay the fee in a timely manner will cause the DAQ to initiate action to revoke the permit.
4. EQUIPMENT RELOCATION - In accordance with 15A NCAC 2Q .0301, a new air permit shall be obtained by the Permittee prior to establishing, building, erecting, using, or operating the emission sources or air cleaning equipment at a site or location not specified in this permit.
5. REPORTING REQUIREMENT - In accordance with 15A NCAC 2Q .0309, any of the following that would result in previously unpermitted, new, or increased emissions must be reported to the Regional Supervisor, DAQ:
  - a. changes in the information submitted in the application regarding facility emissions;
  - b. changes that modify equipment or processes of existing permitted facilities; or
  - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

6. In accordance with 15A NCAC 2Q .0309, this permit is subject to revocation or modification by the DAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. In

accordance with G.S. 143-215.108(c)(1), the facility shall be properly operated and maintained at all times in a manner that will effectuate an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air cleaning device(s) and appurtenances.

7. In accordance with G.S. 143-215.108(c)(1), this permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.
8. In accordance with G.S. 143-215.108(c)(1), this issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the effective date of this permit.
9. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or Local water quality or land quality control authority.
10. In accordance with 15A NCAC 2D .0605, reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Regional Supervisor, DAQ at such intervals and in such form and detail as may be required by the DAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.
11. A violation of any term or condition of this permit shall subject the Permittee to enforcement pursuant to G.S. 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.
12. Pursuant to North Carolina General Statute 143-215.3(a)(2), no person shall refuse entry or access to any authorized representative of the DAQ who requests entry or access for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
13. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with any applicable Federal, State, or Local requirements governing the handling, disposal, or incineration of hazardous, solid, or medical wastes, including the Resource Conservation and Recovery Act (RCRA) administered by the Division of Waste Management.
14. PERMIT RETENTION REQUIREMENT - In accordance with 15A NCAC 2Q .0110, the Permittee shall retain a current copy of the air permit at the site. The Permittee must make available to personnel of the DAQ, upon request, the current copy of the air permit for the site.
15. CLEAN AIR ACT SECTION 112(r) REQUIREMENTS - Pursuant to 15A NCAC 2D .2100 "Risk Management Program," if the Permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the Federal Clean Air Act, then the Permittee is required to register this plan with the USEPA in accordance with 40 CFR Part 68.

16. PREVENTION OF ACCIDENTAL RELEASES - GENERAL DUTY - Pursuant to Title I Part A Section 112(r)(1) of the Clean Air Act "Hazardous Air Pollutants - Prevention of Accidental Releases - Purpose and General Duty," although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release. **This condition is federally-enforceable only.**
17. GENERAL EMISSIONS TESTING AND REPORTING REQUIREMENTS - If emissions testing is required by this permit, or the DAQ, or if the Permittee submits emissions testing to the DAQ in support of a permit application or to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow all DAQ procedures including protocol approval, regional notification, report submittal, and test results approval. Additionally, in accordance with 15A NCAC 2D .0605, the Permittee shall follow the procedures for obtaining any required audit sample and reporting those results.

Permit issued this the 26<sup>th</sup> of July, 2021.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION



Taylor Hartsfield, EIT, CPM  
Regional Supervisor  
By Authority of the Environmental Management Commission

Air Permit No. 04386R16

